

Contents

Executive Summary.....	3
Introduction	5
Background	5
Methodology.....	6
Lessons learnt findings.....	7
Lessons and recommendations	8
Extending PACC.....	12
Workshop Evaluation.....	13
Conclusion.....	14
Appendix 1. Session Plan - Lessons learnt workshop.....	15
Appendix 2. Workshop rules.....	18
Appendix 3. Project timeline and participant feedback	19

Disclaimer:

This report has been prepared by Mr Martin Pritchard for the Ministry of Lands, Environment, Climate Change and Natural Resources, Kingdom of Tonga. Whilst care has been taken in the preparation of the material in this document to ensure its accuracy, Martin Pritchard and other contributors do not warrant that the information contained in this document is error-free and, to the extent permissible under law, it will not be liable for any claim by any party acting on such information.

Acknowledgements:

The author would like to acknowledge the support of Mr Paula Taufu, Tonga PACC Project Manager from the Ministry of Lands, Environment, Climate Change and Natural Resources for organising and hosting the lessons learnt workshop. The author would also like to acknowledge the assistance of Mr Samuela Pakileata, Tonga PACC Project Officer for assisting during the workshop with translating Tongan to English. Thanks also to Mr Damien Sweeney from Pacific Research Evaluation Associates for reviewing the report. The author would like to acknowledge the time and input given by the 30 project stakeholders who attended the lessons learnt workshop.

Front cover image:

Siosi'ana Fanua and family from Kolovai have their photo taken in front of their new water tank provided by the PACC project.

Executive Summary

Tonga is one of fourteen countries taking part in the five year United Nations Development Program Global Environment Fund Pacific Adaptation to Climate Change (PACC) programme. The objective of the Tonga PACC project is to increase resilience to climate change impacts through the implementation of demonstration adaption measures to improve water security in the Hihifo district of Tongatapu. The main water security improvement measures involved the upgrading of the village water supply (public water system) and these improvements were completed in March 2014.

Thirty project stakeholders from Government departments, Hihifo villages, the private sector and NGOs attended a lessons learnt workshop for the Tonga PACC project in May 2014. The purpose of the workshop was to document lessons learnt from the design, planning and implementation of the Tonga PACC water project. These lessons come from a reflection of the project activities and asking three key questions; what worked well, what can be improved, and what would the project team and stakeholders do differently next time. The lessons can be shared within Tonga, with the regional PACC team and more broadly with other Pacific Island countries implementing development, climate change or water security related projects.

The lessons learnt workshop uncovered some important findings and lessons that can be considered by future projects. The key lessons that can be extracted from the workshop focus on the key themes of participatory project management, collaboration and communication. Participatory project management involved engaging deeply with the target group and beneficiaries to help uncover the core problem to be solved, alternative solutions, selection of the best solution and in some cases involvement in implementation, monitoring and evaluation. This helps ensure their buy-in and support for the project and sustainability of project benefits. Collaboration both at the regional Pacific level and Government department country level was shown to yield good outcomes for projects. These outcomes might be through facilitating projects to be able to scale up through regional support or to avoid potential project implementation problems through synchronising project timelines. The need for effective, regular communication between key project implementation stakeholders was noted as a strength of the Tonga PACC project. However, it was identified that there was a need for more communication between implementing contractors, the PACC project team and the communities in the Hihifo villages.

A summary of the key lessons obtained from the workshop are outlined below with further details presented in the report:

- Concept notes are useful documents to attract donor funding.
- Collaborations can cost effectively scale up or expand interventions.
- Involve Town Officers (village leaders) in survey implementation.
- Community consultations can help resource managers become more aware of the scope and scale of issues faced by households.
- Establish a procurement committee to select contractors.
- Closer contractor supervision to ensure quality of work.
- Clear and continuous communication is the key.
- Participatory Project Management and community engagement from the start is the key to getting buy-in and ownership from the community.

- Ensure project scope is documented, signed off and communicated.
- Cross-sector project coordination can avoid problems.
- Demonstration measures should now be replicated to remote needy communities.

The workshop provided an opportunity for the PACC project team to update project stakeholders on the project's achievements to date and challenges faced. Participants also benefited from the opportunity to learn how to facilitate a lessons learnt workshop. The simple workshop evaluation and feedback obtained indicates that the workshop was thought to be both useful and valuable.

Conducting a lessons learnt workshop to invite open and honest feedback on a project is a brave initiative and the PACC Tonga project team is to be commended for leading this initiative.

Introduction

The Pacific Adaptation to Climate Change (PACC) project in Tonga contained three key components. Firstly, the project focused on mainstreaming climate change into Government policy through amending the existing National Water Bill and creating a new National Water Policy. Secondly, the project implemented a demonstration project to increase the climate change resilience of communities in the Hihifo district of Tongatapu through improved water security. Finally, the project created guidelines and knowledge management products to share the processes followed and what was learnt so that other Pacific Island Countries (PICs) can learn and replicate the policy improvements and demonstration measures implemented in Tonga. This report forms one of the knowledge management documents from the project and it contains the findings from a workshop conducted with 30 project stakeholders to uncover what lessons can be learnt through the design, planning and implementation of the Tonga PACC project.

Background

The United Nations Development Program Global Environment Fund PACC project is a five year USD 13M programme of action, which began implementation in February 2009 with financing from the Special Climate Change Fund. The project is executed by the Secretariat of the Pacific Regional Environmental Programme (SPREP), who work directly with fourteen National Implementing Partners (typically government entities based in each of the countries that are part of the project). Since June 2011, an additional USD7.8M of Australian Government funding had been utilized to complement and add value to the on-going PACC project. Australia's contribution will build on existing project delivery mechanisms established through the PACC in order to facilitate the replication and up-scaling of practical adaptation measures and strengthen overall implementation of the project through increasing assistance for the programme support and knowledge management activities.

The project supports participating countries through 3 closely interrelated outcomes aiming at (1) integrating climate change and disaster risks into national and sectoral strategies, (2) implementing on-the-ground demonstration measures in pilot communities, and (3) raising awareness on Climate Change matters and capturing and communicating project experiences and lessons learnt.

Tonga is one of the fourteen Pacific countries participating in the PACC Project. Tonga's national lead agency for PACC is the Ministry of Lands, Environment, Climate Change and Natural Resources. The Tonga PACC Project in collaboration with key stakeholders will help to increase the climate resilience of communities in the Hihifo district through improving water security. The main outputs and deliverables of the PACC project to date include:

- Amendments to the existing National Water Bill to include climate change considerations
- National Water Policy for Tonga drafted
- Completion of a socioeconomic assessment and vulnerability assessment on water resources
- Completion of design for new water system
- Installation of four new solar powered water pumps
- Installation of new treatment plant for underground bore water to increase water quality
- Installation of three 45,000 litre community water tanks to store the treated ground water and supply the six villages of Hihifo.
- Installation of one raised 22,500 litre head tank to supply additional water pressure to remote villages

- Installation of one raised 5000 litre head tank to supply Foui village
- Installation of 21.18 kilometres of new water pipe to connect the water supply to the six villages
- Provide a water meter for household to connect to the new main water line.

The Ministry of Lands, Environment, Climate Change and Natural Resources, Government of Tonga, has contracted the services of Mr Martin Pritchard to facilitate a lessons learnt workshop and produce a report of findings and recommendations that can be shared with both the PACC project team and other PICs.

Methodology

The lessons learnt workshop was hosted on Thursday 29th May between 10 and 12 am at the Tungi Arcade Conference room in Nuku'alofa, Tonga. The Ministry of Lands, Environment, Climate Change and Natural Resources hosted the workshop and invited 30 project stakeholders representing:

- Members from the Tonga PACC project team
- Members from the Ministry of Lands, Environment, Climate Change and Natural Resources
- Members from other related Government departments (e.g Ministry of Health)
- NGO representatives involved with the project
- Town Officers from the six villages located in the Hihifo district
- Contractors involved in the project implementation

The workshop was opened with the screening of a video documentary of the opening event for the Tonga PACC water project. Mr Paula Taufu, the Tonga PACC project manager then gave a presentation to summarise the key stages and achievements of the project. Mr Martin Pritchard was then introduced and facilitated the remainder of the lessons learnt workshop as per the session plan documented in Appendix 1. Participants were talked through the agenda for the session (see the session plan) and introduced to the 'rules' to follow during the workshop (see Appendix 2). The workshop used four key strategies to collect lessons learnt feedback from participants:

1. Participants were asked to create a timeline of key project events using sticky notes and posting them on a wall in chronological order. This helped to remind everyone of the work that had taken place and their role in the project.
2. As a group, participants reviewed the key tasks and for the various tasks, they responded to three key questions:
 - What worked well?
 - What can be improved?
 - What would we do differently next time?

Participants and the facilitator wrote responses to the questions and posted them on the timeline near the related key event or activity.

3. As individuals, participants were invited to write more feedback to the questions and stick their feedback up on the timeline.

Mr Paula Taufu, Tonga PACC coordinator opening the workshop



4. Participants were asked to write down on paper additional feedback that they would prefer not share with the group. At the end of the workshop, this feedback was collected in a bag and it was later reviewed in private by the facilitator and included in the report in a way to ensure the anonymity of participants.

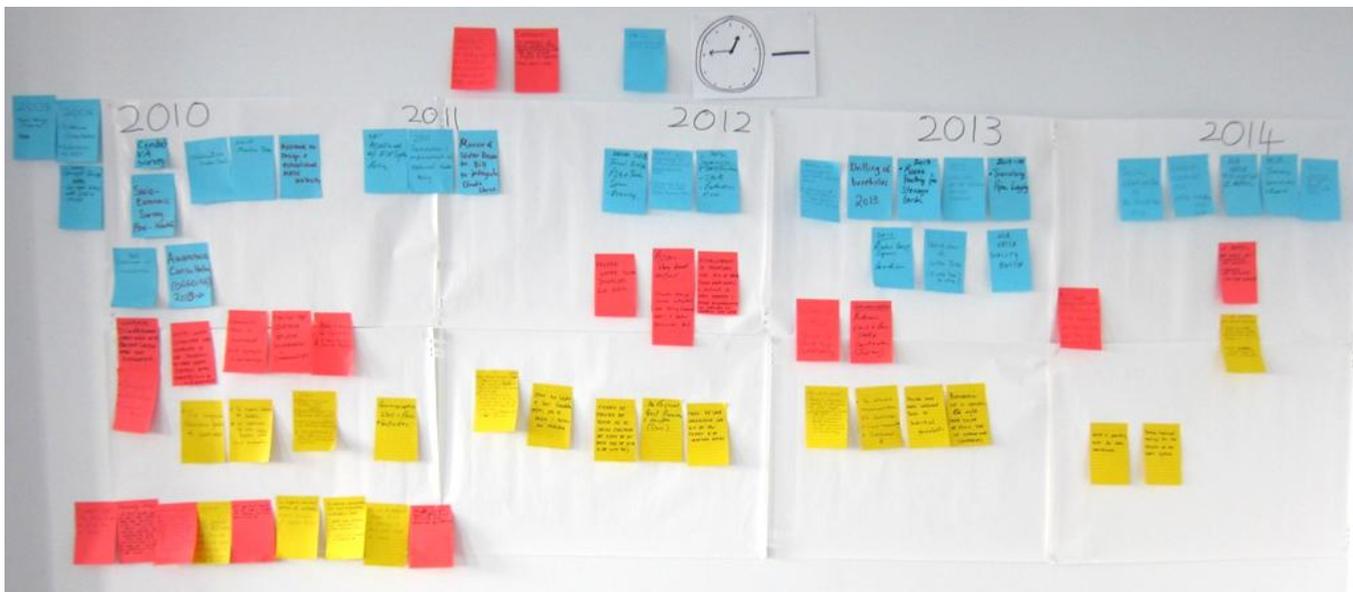
The workshop concluded with a short question and answer session which provided participants with an additional opportunity to gain clarity on issues of concern to them.

Lessons learnt findings

Participants created a timeline of key events in the Tonga PACC project and then provided their feedback to the three key questions on post-it notes (see figure 1). The three key questions addressed by participants were:

- What worked well?
- What can be improved?
- What would we do differently next time?

Figure 1. Project timeline and feedback to the three key questions.



The timeline and participant feedback was typed up and documented in a table for reporting purposes (see Appendix 3). A summary of the key findings and lessons derived from the lessons learnt workshop are documented below.

Lessons and recommendations

Concept notes are useful documents to attract donor funding.

The development of a concept note for a project can serve as a useful document to attract donor funding. The concept note can succinctly articulate the problems faced by a community or country (the needs) and propose solutions to the problems.

Participant Feedback

“Concept note helped secure the required funding. The use of concept note could be a good model to replicate in other PICs”

Collaborations can cost effectively scale up or expand interventions.

The collaboration between PACC and Australian Aid to create PACC+ allowed PACC countries to scale up and expand upon their existing PACC initiatives. The extra PACC+ funding helps to leverage the existing PACC investment by replicating what has already worked well in PACC or through keeping the momentum of the PACC country project teams going to expand upon the initiatives undertaken. The additional PACC+ funding results in the cost effective delivery of climate change adaptation measures for participating countries. It likely also results in reduced overhead and administration costs for the PACC+ donors who can rely on the existing PACC mechanisms to distribute funds and manage the project.

Participant Feedback

“Partnership and collaboration between Australia & GEF led to successful implementation of PACC project”

Involve Town Officers (village leaders) in survey implementation.

External expertise can be brought into the project to help design and oversee survey work, however, Town Officers (or villages leaders) need to be involved in the survey implementation process to ensure that **all** households in the village are surveyed and accounted for. This will help ensure that the correct number of resources are purchased to address the needs of each household. The use of a village level community map of households co-created by the town officer, community and project team could be used to help ensure no households are missed.

Community consultations can help resource managers become more aware of the scope and scale of issues faced by households.

The socio-economic survey and follow-up consultation informed the Tonga PACC project and it also provided the Hihifo water committee (water resource managers) with a good understanding of the water issues being experienced by households in the Hihifo district. Community consultations also brought the Hihifo water committee more together as a team and increased their overall effectiveness through the scheduling of regular meetings and capacity building that occurred later in the project.

Establish a procurement committee to select contractors.

The establishment of a procurement committee may address two issues raised in the lessons learnt workshop. Firstly, the need for a more rigorous contractor selection process to ensure the appointment of the most qualified and capable contractor occurs. Additionally, where this does occur, the committee can ensure the selection process is transparent so that others can determine why the contractor was appointed which will avoid the perception that the contractor was appointed without a rigorous process. Secondly, the procurement committee may be able to ensure contractors are paid for their services within the specified invoice terms (30 or 60 days) by bypassing some of the time consuming Government processes.

Participant Feedback

“Selection process of contractors needs to be improved” (2 responses)

“Long time delay between procurement of goods and services and payment of contractors in Tonga.” (3 similar responses)

“We ran out of money before the payment was approved”

Closer contractor supervision to ensure quality of work.

The quality of the contractors work should be closely monitored through regular audits and inspections. The contractor should be held accountable to deliver their work according to a set of detailed specifications. Where the contractor is found not to meet the specification, then they need to be requested to redo the work according to the specification or if only a minor issue or breach, then continue their work according to the specification. Final payment to contractors should be withheld until work is completed to a satisfactory quality that meets the specification.

Participant Feedback

“Contractor did not follow work plan”

“Project did not fully follow the original project plan”

Clear and continuous communication is the key.

Clear and continuous communication is the key for building good working relationships and keeping stakeholders informed. This was both a strength and weakness for the PACC project. It was noted as a strength when looking at the communication between Government departments and between the PACC team and water engineer. It was also noted as an area for improvement for communication between the contractor and the community. Had the community at the household level been kept better informed of what was required of them and what the contractor would and would not do, then this would have cleared up many misunderstandings and led to an even better outcome in terms of public perception of the PACC project.

Participant Feedback

“[there was] Good communication with stakeholders”

“Communication between Government and communities needs to be strengthened.”

“Communication between VWC and PACC staff and contractors needed to be improved”

Participatory Project Management and community engagement from the start is the key to getting buy-in and ownership from the community.

Involving communities in the project design phase can help ensure projects have their full buy-in and support for the chosen solution. Empowering communities to help them determine what are the best solutions to the problems they face is a worthy goal. However, it is noted that it can also be a time-consuming process and does not always arrive at the best solution unless it is backed up with capacity building (in this case, basic water engineering) and knowledge sharing on the benefits and weaknesses of proposed solutions. There was a strong feeling amongst participants that the PACC project could have been more inclusive of the community in the design of the project. The lack of inclusion and poor communication resulted in a loss of trust between the community and Government. It also resulted in the communities not being proactive in assisting the implementation of the project.

Participant Feedback

“There was a lack of trust between the Government and the communities.”

“Let the community decide how to fix their water problems rather than [others] demanding the community do things. This way the community feel responsible for the project and they understand the project aims. People then feel responsible for protecting their water supply.”

“Communities lacked the motivation to play their role and assist with project implementation”

Working closely with communities is important to avoid the perception that “communities believe that donor funded projects take away their responsibility to assist. It makes them sit waiting for someone to spoon feed them.”

Ensure project scope is documented, signed off and communicated.

It is important to document the project scope and detailed specification and communicate this to project stakeholders. This can help avoid confusion or changes in scope when project stakeholders change or new people take over existing roles within a project.

Cross-sector project coordination can avoid problems.

A whole of government, cross-sector review of development projects can help sequence the timing of project implementation to minimise potential problems. The NZ Aid funded project to replace Tongatapu’s electricity poles and transmission wires was implemented in the Hihifo district just months after the new village water supply main pipeline was laid by the PACC project. The heavy machinery used to replace electricity poles reportedly created breakage and leaks in the new village water supply main pipeline. This problem could potentially have been avoided if the works for the two projects were scheduled differently. The real life applicability of this lesson is of course limited by project timelines and donor project expenditure requirements.

Demonstration measures should now be replicated to remote needy communities.

The success of the Tonga PACC project has provided participants with the confidence that the upgrading of village water supply systems should be extended to more remote needs communities in the outer islands of Tonga (Ha’apai, Vava’u & Niuaus).

Positive unexpected outcomes.

Whilst not a core objective of the Tonga PACC project, a framework was established for the Ministry of Health, Tonga Water Board and Ministry of Environment and Climate Change to work together. This framework will help reduce misunderstanding on overlap and responsibility for authority over water in Hihifo water supply.

Learning by doing.

Conducting a lessons learnt workshop was a new experience for most people attending the session. All participants were provided with a 'how to conduct a lessons learnt workshop'¹ guide to assist them to facilitate their own lessons learnt workshops for future projects. Therefore, the lessons learnt workshop also becomes part of the internal capacity building outcomes delivered by the PACC project to up-skill Government staff and members from the private sector and NGO sectors.

Extending PACC

Several workshop participants provided feedback about what they would like to see happen at the end of the PACC project. These suggestions are outside the scope of the lessons learnt process, but they are worth noting as they provide an indication that participants saw the PACC project successful enough to want to replicate some components:

- Continue the installation of rainwater tanks (install more)
- Leverage the Tonga PACC education program share this information with other vulnerable communities in Tonga
- Continue to collect scientific data on how climate change will impact water resources in Tonga

Figure 2. Mr Paula Taufu, Tonga PACC coordinator responds to questions from participants



¹ Evaluation Toolbox, 2011 "How to conduct a lessons learnt workshop", <http://www.evaluationtoolbox.net.au> Select Templates menu and look for "How to conduct a lessons learnt workshop"]

Workshop Evaluation

A very simple workshop evaluation was conducted at the end of the session. The evaluation had two purposes. Firstly to gauge what participants thought of the session given this was the first ‘lessons learnt’ workshop many had attended. Secondly, and most importantly, by responding to the simple evaluation questions it provided a ‘cover’ for participants who wanted to provide feedback in private that was not to be shared with the group. By requesting everyone write something on their evaluation slip, no-one could easily tell if a participant was responding to the evaluation or providing confidential feedback.

All participants who completed the evaluation (18 participants) thought the workshop was either useful (8) or very useful (10) (see figure 3). All participants reported having learnt some new things (7) or learnt many new things (11). Participants provided a number of unsolicited positive verbal comments after the workshop had ended. Considering the results from the evaluation, the lessons learnt workshop was found to be both useful and educational for participants.

Figure 3. Was the lessons learnt workshop useful?

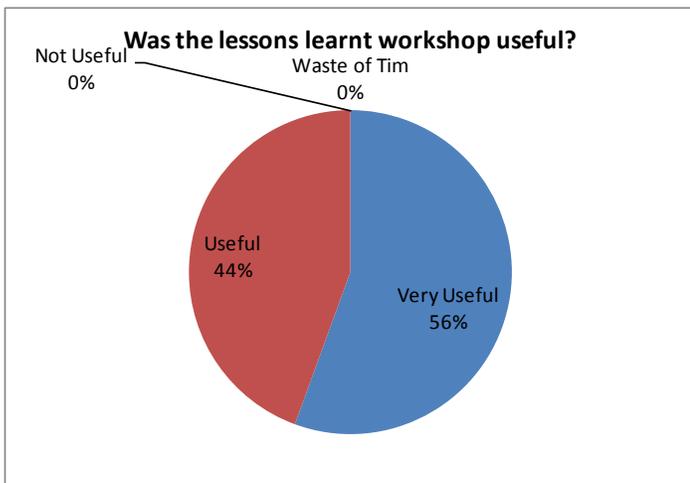
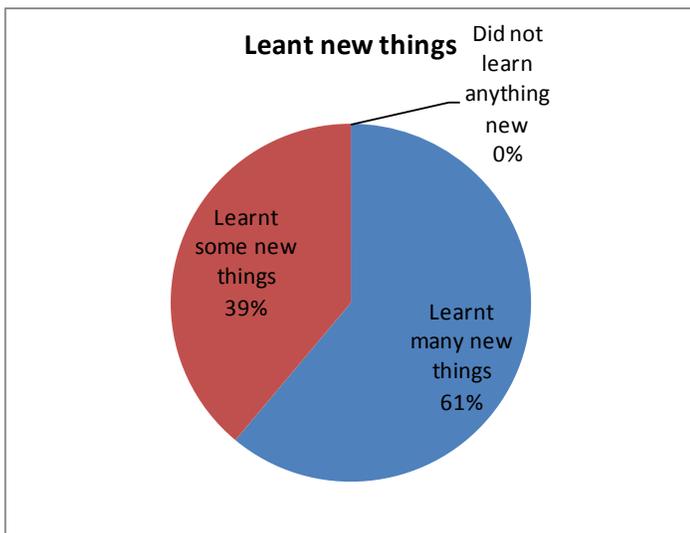


Figure 4. Learnt new things



Conclusion

The lessons learnt workshop conducted for the Tonga PACC project has uncovered some important findings and lessons that can be considered by future projects. The key lessons that can be extracted from the workshop focus on the key themes of participatory project management, collaboration and communication. Expanded on in more detail, the key lessons obtained from the workshop are:

- Concept notes are useful documents to attract donor funding.
- Collaborations can cost effectively scale up or expand interventions.
- Involve Town Officers (village leaders) in survey implementation.
- Community consultations can help resource managers become more aware of the scope and scale of issues faced by households.
- Establish a procurement committee to select contractors.
- Closer contractor supervision to ensure quality of work.
- Clear and continuous communication is the key.
- Participatory Project Management and community engagement from the start is the key to getting buy-in and ownership from the community.
- Ensure project scope is documented, signed off and communicated.
- Cross-sector project coordination can avoid problems.
- Demonstration measures should now be replicated to remote needy communities.

The workshop provided an opportunity for the PACC project team to update project stakeholders on the project's achievements to date and challenges faced. Participants also benefited from the opportunity to learn how to facilitate a lessons learnt workshop. The simple workshop evaluation and feedback obtained indicates that the workshop was thought to be both useful and valuable.

Soliciting honest and open critical feedback in the Pacific context remains a challenging task given the polite and shy nature of participants and need to show respect to colleagues, extended family and superiors. Future lessons learnt workshops could modify the existing methodology to include more small-group activities and additional one-on-one private interviews preceding or following the workshop.

Conducting a lessons learnt workshop to invite open and honest feedback on a project is a brave initiative and the PACC Tonga project team is to be commended for leading this initiative.

Appendix 1. Session Plan - Lessons learnt workshop

Date	29 May 2014	Location	Tonga
Time	10 - 12	Client Contact	MoE
Resources	Flipchart or butchers paper, sticky notes, pens. Workshop rules & prompts sheet. Optional: laptop & projector		

TIME	DURATION	CONTENT / KEY LEARNING POINT	LEARNING ACTIVITIES	FACILITATOR	RESOURCES
10.00	20m	<p>Introduction & welcome</p> <ul style="list-style-type: none"> • Waiting 10 min – • Welcome 5 min • Introduction 5 min – Summarise Why conducting workshop. Session outline & Rules for the workshop <p>Recognize and document lessons so that the future projects do more of the successful things and less of the unsuccessful things. Shared internally and with others</p> <ul style="list-style-type: none"> • Summarise what the project goals & objectives are and some key achievements of the project 	Screen project photos or video or something to start creating context whilst we wait for people to arrive.	Paula & Sam MP Paula	Projector & Tonga Video \$ Attendance list Butchers paper with agenda & rules
10.20	15m	<p>Build project timeline</p> <p>To remind us all what the key tasks and activities are we are going to build a timeline of activities in the project. We can then reflect upon the activities to help us identify the lessons.</p>	Pin up butchers paper with timeline (Years, months or weeks of project duration) Invite participants to write key project phases & tasks on sticky notes and pin up on timeline Read out key activities as they are stuck up. Invite people to walk through timeline.	MP	Butchers paper with time line & sticky notes.
10.35	20m	<p>What worked well?</p> <p>Ask participants to suggest responses to the following: Reflecting on all the project activities and</p>	Facilitator documents feedback on sticky notes and pin up on timeline. If short of time, have participants write	MP	Sticky notes

		<p>the project as a whole</p> <ul style="list-style-type: none"> • What did the project do well (what should we do more of) • List top significant project successes? 	<p>up their own feedback / lessons and stick them up – Risk that they won't document it with enough detail & you can't easily probe for more information later when reading notes after workshop</p>		
10.55	5m	Short break - Energiser activity			
11	30m	<p>What can be improved? As above, ask participants to reflect on the project activities and project as a whole and answer:</p> <ul style="list-style-type: none"> • What could have been improved in the project? • What challenges made it difficult to complete the project? • What was the most frustrating thing about working on the project? • What would we do differently next time? 	<p>Facilitator documents on sticky notes and pin up on timeline</p>	MP	Sticky notes
11.30	15m	<p>Invite more feedback. This time, participants write their own. Review the activities on the timeline and for each activity you were involved see if you can identify any lessons. Use the prompts pinned up in the room to help identify components of the project to think about when trying to identify your lessons.</p>	<p>Invite participants to get up and add more sticky notes to timeline of lessons or feedback. If no more feedback, read out some existing feedback and see if need to get more info to identify the lesson and what would be done differently next time.</p>	MP & All	Sticky notes
11.45	5m	Where there any positive or negative unintended outcomes that were not anticipated?	Facilitator documents on sticky notes and pin up on timeline	MP	Sticky notes
11.50	5m	Evaluation & privately share your lessons & feedback	<p>Hand out sheet of paper to ALL participants. Everyone needs to write</p> <ol style="list-style-type: none"> 1. How useful they though the session was. Very Useful, useful, 	MP & ALL	Blank paper & box / bag

			<p>Neutral, Not useful, waste of time.</p> <p>2. How enjoyable. Very enjoyable, enjoyable, neutral, not enjoyable, terrible.</p> <p>3. Other feedback & lessons. If you were too shy to share your lessons, write them down – you remain anonymous.</p>		
11.55	5m	<p>Conclusion Thanks participants. Take additional feedback via email How to communicate lessons to attendees? PACC web, contact Paula? Refreshments Pay remaining sitting allowance</p>		<p>Martin & Paula Martin</p> <p>Paula Martin</p>	\$

Appendix 2. Workshop rules

Ideally, ask participants to identify the workshop rules, or provide some of the rules below and get them to add to them.

Instead of just reading out the rules, it can be helpful to write them in large print and pin them up in the workshop venue as a reminder for all participants.

- Be respectful to other people
- Don't blame other people
- Avoid naming or targeting individual people
- Be constructive if you have criticism.
- Equal participation - Give others a chance to speak
- Focus on what we learnt
 - What worked well?
 - What can be improved?
 - What would we do differently next time?

Appendix 3. Project timeline and participant feedback

This document is a summary of the project timeline of key activities created by participants during the lessons learnt workshop. Feedback to the three key questions is then posted near the activity pr year it is related with. General feedback was also documented at the end of the timeline as it was not associated with any one key activity or year.

Year	Activity	What worked well?	What can be improved?	What would we do differently next time?
2003	Regional project design			
2004	National consultation			
	Concept design with Department of Environment and UNDP	Concept note helped secure the required funding. The use of concept note could be a good model to replicate in other PICs		
	Submission of proposal to GEF			
2008 – 2011	PACC project negotiations and contracting	Partnership and collaboration between Australia & GEF led to successful implementation of PACC project.		
2010	Conduct Vulnerability assessment survey			
	Conduct socio-economic survey		Some households were not accounted for during the survey. This resulted in the project not procuring enough water meters to install one on each household in each of the six villages.	External expertise can be brought into the project to help design and oversee survey work, however, Town Officers (or villages leaders) need to be involved in the survey implementation process to ensure that ALL households in the village are surveyed and accounted for. The use of a village level community map of households co-created by the town officer, community and project team could be used to help ensure no households are missed.

	Community consultation	Consultation made Hihifo water committee aware of the problems of their water system through surveys and consultations		
		Effective and ongoing consultations bring the water committee together		
		Community engagement and taking ownership of the project was a key factor in the completion and implementation of the project. Main community engagement was making land available for the reservoir and pumping sites.		
	Contracting		Selection process of contractors needs to be improved (2 responses) It was viewed by some that a contractor was appointed who did not have sufficient experience to carry out the required works. This view is easily expressed in hindsight and perhaps more difficult to determine at the decision making stage. Without knowledge of the experience the contractor claimed to have and the competing contractors bids, it is difficult to assess the validity of this claim.	
			Contractors did not work closely with the communities	
			Insufficient communication of issues or problems that the project was facing.	

			Long time delay between procurement of goods and services and payment of contractors in Tonga. (x3)	Consider use of a procurement committee to speed payment “We ran out of money before the payment was approved”
			There could have been clearer understanding on the roles that the contractor, community and PACC team were to play in the project	Allocate a larger budget for the end of the project to support the sustainable use of water resources at Hihifo (Ongoing support needed?)
			Need for improved communication between VWC and PACC team and contractors.	Let the community decide how to fix their water problems rather than the district town officers demanding the community do things. This way the community feel responsible for the project and they understand the project aims. People then feel responsible for protecting their water supply.
				Involve and engage community in the design of the project. Following this step may have avoided issues and problems that arose later in the project. (x4)
				Future recommendation – expand the PACC project to the smaller more remote islands of Tonga that are very vulnerable to climate change impacts. (Ha’apai, Vava’u & Niuaus.
				Be more open and clear when communicating with the communities.
				Improve the selection process for contractors by having a selection panel
				Keep the community informed of the contractor selection process.
				Enhance communication between local

				communities, contractors and Government
				Involve the community more in the decision making process
				Keep local communities informed on all issues.
				Engage the Ministry of Finance in project planning so that regional to national financing arrangements work better.
	Establishment of Village Water Committee			
	Establish Ministry of Environment & Climate Change website www.mecc.gov.to			
		There was good coordination between project coordinator and water engineer.		
		Communities, NGO's and Government build synergies and partnerships		
2010 – 2014		Cooperation – The contribution of various ministries, stakeholders through networking supported the PACC project achieve its objectives		
		Funding requested to deliver this project was received on time (Donor -> Tonga)		
2011	Assessment of old system and old water policy			
	Formulation and endorsement of national water policy	Policy contained good content.		
	Review of water resource bill	Climate change issues were		

	to integrate climate change	integrated into the water resource bill.		
		A framework was established for Ministry of Health, Tonga Water Board & MLECCNR to work together. This helps reduce misunderstanding on overlap and responsibility for authority over water in Hihifo.	Communication between Government and communities needs to be strengthened.	
			Communities lacked the motivation to play their role and assist with project implementation	
			There was a lack of trust between the Government and the communities.	
			There was a lack of understanding about how the GEF funding operates and this regional issue caused issues at the local level (funding)	
			The delay between design and implementation was 5 years and this was considered to be too long.	
2012	Final design Project document and technical specification and drawings completed		Question has been raised if the design has accurately estimated the water supply requirements for the households in the Hihifo district. This relates to current supply shortage issues for some households at some times of the day. This issue can't be confirmed until other project issues are resolved.	

	Construct and install 30 x 10,000 ltr rainwater tanks for households.			
	Construction of 3 x 45,000 ltr low level water storage tanks	A proper water system was installed in Hihifo		
	Construction of 6 pump houses and protection fences			
2013	Drilling of new bore holes for water pumping & monitoring.			
	Construct raised footings for storage tanks			
	Capacity building workshops			
	Trenching and pipe laying	Pipe trench was not deep enough. Some pipes in Kolavai are broken and leak. Some broken pipes have been caused by heavy machinery used in the upgrade of the electricity poles (non-PACC related)		
	Installation of 30 household water tanks (5 per village)			FUTURE: Leverage education program and share information with other vulnerable communities in Tonga.
	Water quality monitoring started			Enhance communication between contractors, local communities and Government
		Some workshop attendees thought that the project did not fully follow the original project plan (make sure project follows the planning guideline) The PACC team feel that the project did follow the original plan. The only changes to the plan were		More household rainwater catchment tanks should have been provided to households.

		made on advice from the project engineer.		
		Established Water committee could provide a voice for the community	Communication between VWC and PACC staff and contractors needed to be improved	Consider the impact of running solar pumps that do not run at night on the water supply.
2014	Trenching and pipe laying continued			
	Install water meter to all homes			
	Develop guidelines for water management			
	Water reticulation GIS mapping	Good communication with stakeholders	Should have been involved earlier in the project implementation.	
	Training			
	Water system commission report produced			FUTURE: Need permanent staffing to continue to support the PACC project – Engineer and Technical support
	Hihifo water supply launched			FUTURE: Assist in providing tools for water maintenance.
	Community has changed attitude and is willing to be responsible for their own household water usage and be prepared to pay for their usage (instead of flat rate pricing)			FUTURE: Provide technical training for the operation of the water system. <Editors note. Training to the VWC is being provided in the weeks following this workshop>
				Reconsider the location of the water storage system. It may be better to move it inland to reduce impact if a tsunami were to hit.
			Contractor did not follow work plan	Future: Hand over of the management of the water supply to the Hihifo Water Committee

			Better project planning – then stick to the plan	FUTURE: Further investment needed on science and a research project to collect accurate data on climate change in future and how it will impact water resources in Tonga.
			Improved communication with community and donor	
			One contractor felt that the budget allocated to complete works was insufficient and that they paid some out of pocket expenses. <Editors note – contractors choice to bid for project>	Communities believe that donor funded projects take away their responsibility to assist. It makes them sit waiting for someone to spoon feed them
			<p>During the transition of town officers in one village there was some confusion around what was and was not in scope for the project. A hand-over meeting that involves both new and old town officers could help resolve this issue.</p> <p>It was noted that there was no change in scope for the project.</p>	Plan your work, then work your plan